

Grade 5 – Scientists

Companion Resources for the ELA Guidebooks for Students with Significant Cognitive Disabilities



This past year, the Department created the Companion Resources for the ELA Guidebooks for Students with Significant Cognitive Disabilities to facilitate access and opportunity with a high-quality curriculum, improve professional learning between content area specialists and expert teachers of special education teachers, and increase options for students with the most complex needs to participate in an inclusive and least restrictive environment.

The Companion Resources are available for the 2020-2021 academic year in DRAFT form. For teachers/ schools/ systems choosing to use these Companion Resources, the Department requires you to complete a survey so that we may track implementation and solicit your feedback along the way. Thus, if you have not already, please complete the survey found at the link below.

The Companion Resources are now available in DRAFT form for teachers, schools, and systems to pilot during the 2020-2021 academic year. Please complete the brief survey linked below so that the Department can track implementation and solicit feedback in order to improve the quality of the Companion Resources.

Happy piloting!

We are also including related links to support your introduction to and use of the Companion Resources:

[*ELA Companion Resources Survey*](#)

[*Training: Students with Significant Cognitive Disabilities: Companion Resources for the ELA Guidebooks, Teacher Leader Summit 2020*](#)

[*Guidance for Accessing and Adapting Grade-Level Text*](#)

Special Note to Users of “Scientist” Unit:

- Some sections of the ELA Guidebook Scopes are incomplete; as a result, the user will not find complete entries for the original Additional Supports for Diverse Learners in multiple section overviews. We hope to have this rectified after the 20-21 pilot is complete and before final release of the resources.
- Due to the absence of Essential Elements Cards for informational text, these are only notes regarding additional supports for the RL standards.

Unit Overview

Unit Overview		
Grade	5	Modified Unit Overview
Guidebook	The Making of a Scientist	Original and adapted versions of The Making of a Scientist
Unit Description	We will read <i>The Making of a Scientist</i> by Richard Feynman and a series of related literary and informational texts to explore the question: How have different scientific theories changed over time? We will express our understanding through an essay that analyzes the lesson that Feynman’s father was trying to teach Richard about science.	Students with significant cognitive disabilities will have access to both the original and adapted versions of <i>The Making of a Scientist</i> by Richard Feynman and a series of related literary and informational texts to explore the question: <i>How have different scientific theories changed over time?</i> We will express our understanding through a permanent product that analyzes the lesson that Feynman’s father was trying to teach Richard about science.
Question	How have different scientific theories changed over time?	<i>How have different scientific theories changed over time?</i>
Culminating Writing Task	<p>Consider two of the examples Richard Feynman points out in his memoir: the birds, and the wagon. What lesson was Feynman’s father trying to teach Richard about science through one of these two examples? To answer this question:</p> <ul style="list-style-type: none"> ● Select one of the examples: the birds or the wagon. ● Summarize the example as told by Feynman in “The Making of a Scientist.” ● Identify how Richard’s thinking changed throughout the selected example. ● Determine the lesson Feynman’s father was trying to teach Richard through the example. ● Describe the process of scientific inquiry. ● Compare the process Feynman’s father uses and the lesson he tries to teach in the selected example to the process of scientific inquiry. 	<p>Consider two of the examples Richard Feynman points out in his memoir: the birds and the wagon. What lesson was Feynman’s father trying to teach Richard about science through one of these two examples? To answer this question:</p> <ul style="list-style-type: none"> ● Select one of the examples: the birds or the wagon. ● Summarize the example as told by Feynman in “The Making of a Scientist.” ● Identify how Richard’s thinking changed throughout the selected example. ● Identify examples of the questions he asked. ● Identify the steps in the process of scientific inquiry. ● Match steps of the scientific inquiry to Richard’s thinking. ● Determine the lesson Feynman’s father was trying to teach him about science.

	<p>Write an essay that identifies and explains the lesson Richard Feynman’s father was trying to teach Richard about science, using examples, details, and quotations to develop the explanation. Be sure to use proper grammar, conventions, spelling, and grade appropriate words and phrases, including words that signal relationships (e.g., however, although, moreover, in addition, etc.).</p>	<p>Create a permanent product that identifies and explains the lesson Richard Feynman’s father was trying to teach Richard about science, using examples, details, and quotations to develop the explanation. Be sure to use proper grammar, conventions, spelling, and grade appropriate words and phrases, including words that signal relationships (e.g., however, although, moreover, in addition, etc.).</p> <p>LC.RI.5.1b Quote accurately from a text to support inferences.</p> <p>LC.W.5.2a Produce an informative/explanatory permanent product which has an introduction that includes context/background information on a topic and establishes a central idea or focus about the topic.</p>
Sections & Lessons	9 sections, 38 lessons	5 sections, 20 lessons

Assessment Overview			
Guidebooks Assessments			Modified Assessment Overview
Culminating Writing Task	<p>Students write a multiparagraph essay in response to the prompt: Consider the examples Richard Feynman points out in his memoir, specifically the birds and the wagon. What lesson was Feynman’s father trying to teach Richard about science through one of these examples? To answer this question:</p> <ul style="list-style-type: none"> ● Select one of the examples: the birds or the wagon. ● Summarize the example as told by Feynman in “The Making of a Scientist.” 	<ul style="list-style-type: none"> ● The Making of a Scientist: Culminating writing task directions ● The Making of a Scientist: Culminating writing task exemplar 	<p>Consider two of the examples Richard Feynman points out in his memoir: the birds, and the wagon. What lesson was Feynman’s father trying to teach Richard about science through one of these two examples? To answer this question:</p> <ul style="list-style-type: none"> ● Select one of the examples: the birds or the wagon.

- Identify how Richard’s thinking changed throughout the selected example.
- Determine the lesson Feynman’s father was trying to teach Richard through the example.
- Describe the process of scientific inquiry.
- Compare the process Feynman’s father uses and the lesson he tries to teach in the selected example to the process of scientific inquiry.

Write an essay that identifies and explains the lesson Richard Feynman’s father was trying to teach Richard about science, using examples, details, and quotations to develop the explanation. Be sure to use proper grammar, conventions, spelling, and grade appropriate words and phrases, including words that signal relationships (e.g., however, although, moreover, in addition, etc.).

student response

- Grades 4-5 writing rubric

- Summarize the example as told by Feynman in “The Making of a Scientist.”
- Identify how Richard’s thinking changed throughout the selected example.
- Identify examples of the questions he asked.
- Identify the steps in the process of scientific inquiry.
- Match steps of the scientific inquiry to Richard’s thinking.
- Determine the lesson Feynman’s father was trying to teach him about science.

Create a permanent product that identifies and explains the lesson Richard Feynman’s father was trying to teach Richard about science, using examples, details, and quotations to develop the explanation. Be sure to use proper grammar, conventions, spelling, and grade appropriate words and phrases, including words that signal relationships (e.g., however, although, moreover, in addition, etc.).

LC.RI.5.1b Quote accurately from a text to support inferences.

LC.W.5.2a Produce an informative/explanatory permanent product which has an introduction

			that includes context/background information on a topic and establishes a central idea or focus about the topic.
Cold-Read Task	Students watch “Galileo: Sun-Centered System” and read “Quarter of Americans Convinced Sun Revolves Around Earth, Survey Finds.” Then students answer a combination of questions.	<ul style="list-style-type: none"> • The Making of a Scientist: Cold-read task items • The Making of a Scientist: Cold-read task answer sheet • The Making of a Scientist: Cold-read task answer key • Grades 4-5 writing rubric 	Task is Optional
Extension Task	Students independently read The Templeton Twins Have an Idea: Book 1. Then students write an essay that identifies a theme of the text and compares details in the book to “The Making of a Scientist” by Richard Feynman. Finally, students engage in a group discussion about the book and its findings.	<ul style="list-style-type: none"> • The Making of a Scientist: Extension Task Directions • The Making of a Scientist: Extension task exemplar student response 	Task is Optional

		<ul style="list-style-type: none"> • The Making of a Scientist: Extension task discussion tracker • Grades 4-5 writing rubric 	
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Section Overview		
Section Number	Section 1	Modified Section Overview
Description	The Making of a Scientist	Original and adapted versions of The Making of a Scientist
Assessment	<p>Students write a response to the prompt: “Using two of the examples from the text, explain what Feynman was given and how it influenced his life.”</p> <p>Culminating task connections: Students demonstrate their understanding of the lessons Feynman was given and how it influenced his life.</p> <p>Students also demonstrate their ability to form a claim, cite textual evidence, develop a response, integrate quotations, analyze relationships, and make meaning from the text. This prepares students to write a literary analysis.</p> <p>Reading/Knowledge Look Fors:</p>	<p>Students write a response to the prompt: “Using two of the examples from the text, explain what Feynman was given and provide examples of how it influenced his life.”</p> <p>Culminating task connections: Students demonstrate their understanding of the lessons Feynman was given and how it influenced his life.</p> <p>Students also demonstrate their ability to form a claim, cite textual evidence, develop a response, integrate quotations, analyze relationships, and make meaning from the text. This prepares students to write a literary analysis.</p> <p>Reading/Knowledge Look Fors:</p> <ul style="list-style-type: none"> • How well does the student identify the interactions and

	<ul style="list-style-type: none"> ● How well does the student analyze the interactions and relationship between Richard and his father? ● How well does the student explain the lessons Feynman’s father taught him about observing the world? ● How well does the student understand that one example of Feynman’s father teaching him to observe the world happens when Feynman is wondering about why the birds peck at their feathers? <p>Writing/ELA Skill Look Fors:</p> <ul style="list-style-type: none"> ● How well does the student integrate quotations while maintaining the flow of ideas to develop and support arguments, analyses, and explanations? ● How well does a student include quotations from the text? ● How well does the student include phrasing to show transitions? 	<p>relationship between Richard and his father?</p> <ul style="list-style-type: none"> ● How well does the student identify and summarize the lessons Feynman’s father taught him about observing the world? ● How well does the student identify the example of thinking Feynman goes through when wondering why birds peck at their feathers? <p>Writing/ELA Skill Look Fors:</p> <ul style="list-style-type: none"> ● How well does the student add appropriate quotations to develop and support arguments, analyses, and explanations? ● How well does a student include quotations from the text?
Section Length	5 lessons	3 lessons
Additional Supports for Diverse Learners (Optional)	<p>Before the Section:</p> <ul style="list-style-type: none"> ● Support for Foundational Skills ● Support for Reading Fluency <ul style="list-style-type: none"> ○ Fluency Task <ul style="list-style-type: none"> ■ Excerpt from <i>The Templeton Twins Have an Idea</i> ● Support for Knowledge Demands <ul style="list-style-type: none"> ○ Let’s Set the Context video <ul style="list-style-type: none"> ■ “What is a Scientist? What do Scientists do?” <p>During the Section:</p> <ul style="list-style-type: none"> ○ Support for Language 	<p>Additional Supports for SWSCDs:</p> <ul style="list-style-type: none"> ● Original and adapted versions of The Making of a Scientist ● Louisiana Connectors ● Essential ElementsCards - Grades 3-5 Literature ● Student Response Modes - ELA ● IEP Goals ● Assistive Technology ● Additional Supports for Diverse Learners specific for Section 01 of Grade 05 The Making of a Scientist ● English Language Arts Guidebook Reading Support ● Word lists (e.g., passage- or text-specific words and high frequency words) ● Writing template/checklist

	<ul style="list-style-type: none"> ■ Protocol for Explicitly Teaching Vocabulary ■ Vocabulary Task for ‘translate’ ■ Mentor Sentence Language Task ○ Support for Meaning <ul style="list-style-type: none"> ■ Additional text-dependent questions for Lesson 3 and 4 	<ul style="list-style-type: none"> ● Writing rubric/criteria for development and evaluation of a response
	<p>The Supports Flow Chart includes information, guidance, and supports to use with individual or a small group of students during regular classroom instruction or for more intensive intervention outside of regular classroom instruction. Teachers should consult this document as needed when implementing each lesson.</p>	

Lesson Overview		
Lesson Number	Lesson 1: Observation, Inference, and Discovery	Lesson is Optional
Description	<p>In this lesson, students launch the unit by engaging in an observation and inference activity, beginning to read <i>The Templeton Twins Have an Idea</i>, and setting up structures for successful independent reading. Students create an organizer in their reading logs (character chart) that they use to track important information throughout the unit. Students also prepare to write by previewing the culminating task and begin choice reading for the unit.</p>	
Let’s Express Our Understanding	<p>In your reading log, answer:</p> <p>How do the skills of observation and inference help scientists make discoveries?</p>	
Lesson Look-Fors	<ul style="list-style-type: none"> ● Can students explain the skills of observation and inference help scientists make discoveries? ● Can students clearly express their ideas and listen carefully to understand others’ ideas in discussions? 	
Text(s)	<i>The Templeton Twins Have an Idea</i> by Ellis Weiner	

Materials	Lesson Materials: <ul style="list-style-type: none"> ● Reading log ● Observation/Inference graphic organizer ● Teacher Talk Moves ● Paper bags ● Mystery items 	Possible Supports During the Lesson: <ul style="list-style-type: none"> ● Conversation stems tool
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Lesson Overview		
Lesson Number	Lesson 2: Setting Up Book Clubs	Lesson is Optional
Description	<p>In this lesson, students continue to set up structures for successful independent reading. In their groups, they discuss what good book clubs look like and sound like, and they create a reading schedule. They also set up an organizer in their reading logs for tracking unfamiliar words, and they continue to use the character organizer they created in the previous lesson.</p>	
Let's Express Our Understanding	<p>Write a brief summary of the prologues of <i>The Templeton Twins Have An Idea</i>.</p>	
Lesson Look-Fors	<ul style="list-style-type: none"> ● Can students determine the main idea of the text is that the Professor is meeting with an angry student when he gets the news about his twins being born? ● Can students effectively organize their ideas to create a summary? 	
Text(s)	<i>The Templeton Twins Have an Idea</i> by Ellis Weiner	
Materials	Lesson Materials: <ul style="list-style-type: none"> ● Reading log ● Chart paper and markers ● Book Club Roles chart ● Independent Reading Calendar ● Teacher Talk Moves 	Possible Supports During the Lesson: <ul style="list-style-type: none"> ● Conversation stems tool

Lesson Overview

Lesson Number	Lesson 3: Finding a Main Idea of a Section of a Text	Modified Lesson Overview
Description	<p>In this lesson, students read “Making of a Scientist” for the first time. In this lesson, they determine a main idea of paragraphs 1-3. In the next lesson, they reread the rest of the text, gather evidence, and revise the main idea to include the whole text. Students use context clues to determine the meaning of unknown and multiple-meaning words. Students also prepare to write the culminating task by summarizing the lessons Feynman’s father was trying to teach him.</p>	<p>In this lesson, students read “Making of a Scientist” and an adapted version as needed for the first time. Students determine a main idea in paragraphs 1-3. Students prepare to write for the culminating task by summarizing the lessons Feynman’s father was trying to teach him.</p> <p>LC.RL.5.1a Refer to details and examples in a text when explaining what the text says explicitly.</p> <p>LC.RL.5.2a Summarize a portion of text such as a paragraph or a chapter.</p>
Let’s Express Our Understanding	<p>Fill in the first row of the Evidence Chart by summarizing this example and the lesson Feynman’s father was trying to teach him in paragraphs 1-3 of the text.</p>	<p>Complete the first row of an Evidence Chart by summarizing this example and identifying the lesson Feynman’s father was trying to teach him in paragraphs 1-3 of the text.</p>
Lesson Look-Fors	<ul style="list-style-type: none"> ● Can students explain that Feynman’s father started teaching him very early to observe the world and find it interesting? ● Can students find the main idea of a section of a text, and determine the meaning of unknown and multiple-meaning words by using context clues? 	<ul style="list-style-type: none"> ● Can students identify that Feynman’s father started teaching him to observe the world? ● Can students identify the main idea of a section of a text? ● Can students determine the meaning of unknown words by using context clues or researching meaning?
Text(s)	<p>“The Making of a Scientist” by Richard Feynman</p>	<p>“The Making of a Scientist” by Richard Feynman</p>
Materials	<p>Lesson Materials:</p> <ul style="list-style-type: none"> ● Semantic Map ● Teacher Talk Moves ● <p>Possible Supports During the Lesson:</p> <ul style="list-style-type: none"> ● Conversation stems tool ● choral reading or echo reading 	<p>Additional Supports for SWSCDs:</p> <ul style="list-style-type: none"> ● Student Response Modes ● Adapting Lesson Plans ● Original and adapted versions of The Making of a Scientist ● Additional Supports for Diverse Learners specific for Section 01 of Grade 06 The Making of a Scientist

		<ul style="list-style-type: none"> ● Images, phrases, sentences representing key concepts covered in the lesson. ● Word lists (e.g., passage- or text-specific words and high frequency words) ● Essential Elements Cards - Grades 3-5 ELA (LC.RL.5.2a) <ul style="list-style-type: none"> ○ Story map graphic organizer ○ Blank storyboards ○ Pre-drawn storyboard to use for sorting ○ Picture representations describing the possible details of the specific story ○ Cloze notes with picture supports for text and students input ○ Highlighted text ○ Simplified text options ○ Errorless learning techniques 5 Grades 3-5 Literature ○ Prepared objects, pictures, words, sentence strips, or recorded communication supports to provide access to content and facilitate responding
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Lesson Overview		
Lesson Number	Lesson 4: Analyzing Sections of Text to Determine Main Idea of the Entire Text	Modified Lesson Overview
Description	In this lesson, students collect evidence to support the main idea of the text by summarizing the lessons Feynman’s father taught him. They teach their classmates the meanings of the words they studied in Lesson 3. Students also prepare to write the culminating task by explaining the examples Feynman’s father was trying to teach him.	In this lesson, students collect evidence to support the main idea of the text by summarizing the lessons Feynman’s father taught him. Students prepare to write the culminating task by identifying what Feynman’s father was trying to teach him about the world. LC.RL.5.2b Summarize a text from beginning to end in a few

		sentences.
Let's Express Our Understanding	Work with your partner to write the main idea of "The Making of a Scientist" in 1-2 sentences at the bottom of your Evidence Chart.	Work with your partner to identify and write the main idea of "The Making of a Scientist" in 1-2 sentences at the bottom of your Evidence Chart.
Lesson Look-Fors	<ul style="list-style-type: none"> ● Can students explain how Feynman uses examples to support the main idea that his father taught him to observe the world and find it interesting? ● Can students determine the meaning of unknown words? 	<ul style="list-style-type: none"> ● Can students understand how Feynman's father was trying to teach him to observe the world and find it interesting by having him constantly ask questions when he is curious. ● Can students identify the meaning of unknown words?
Text(s)	"The Making of a Scientist" by Richard Feynman	"The Making of a Scientist" by Richard Feynman
Materials	<p>Lesson Materials:</p> <ul style="list-style-type: none"> ● Semantic Map ● Teacher Talk Moves ● <p>Possible Supports During the Lesson:</p> <ul style="list-style-type: none"> ● Conversation stems tool ● paired/partner reading 	<p>Additional Supports for SWSCDs:</p> <ul style="list-style-type: none"> ● Student Response Modes ● Adapting Lesson Plans ● Images, phrases, sentences representing key concepts covered in the lesson. ● Original and adapted versions of The Making of a Scientist ● Additional Supports for Diverse Learners specific for Section 01 of Grade 06 The Making of a Scientist ● Word lists (e.g., passage- or text-specific words and high frequency words) ● Essential ElementsCards - Grades 3-5 ELA (LC.RL.5.2b) <ul style="list-style-type: none"> ○ Story map graphic organizer ○ Blank storyboards ○ Pre-drawn storyboard to use for sorting ○ Picture representations describing the possible details of the specific story ○ Cloze notes with picture supports for text and students input ○ Highlighted text ○ Simplified text options

		<ul style="list-style-type: none"> ○ Errorless learning techniques 5 Grades 3-5 Literature ○ Prepared objects, pictures, words, sentence strips, or recorded communication supports to provide access to content and facilitate responding
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Lesson Overview		
Lesson Number	Lesson 5: Writing an Evidence-Based Paragraph	Modified Lesson Overview
Description	In this lesson, students write a paragraph to explain what gift Feynman’s father gave him using evidence from the text. This prepares students for writing by having them identify examples from the text, explain what he was given, and how it influenced his life	In this lesson, students add to their permanent product to explain what gift Feynman’s father gave him using evidence from the text. This prepares students for writing by having them identify examples from the text, explain what he was given, and how it influenced his life. LC.RL.5.1b Refer to specific text evidence to support inferences, interpretations, or conclusions
Let’s Express Our Understanding	<p>On your paper add:</p> <ul style="list-style-type: none"> ● a second example, ● a brief explanation of the example, ● and a concluding sentence. <p>Remember to highlight the most important details from the text that you will use when quoting accurately.</p>	<p>Add to your permanent product:</p> <ul style="list-style-type: none"> ● A second example (wagon) ● A brief explanation of the example ● A concluding sentence <p>Remember to highlight the most important details from the text that you will use when quoting.</p>
Lesson Look-Fors	<ul style="list-style-type: none"> ● Can students explain that Feynman’s father gave him the belief that the world is an interesting place that people can learn about through observation? ● Can students quote accurately from a text to write an explanatory paragraph? 	<ul style="list-style-type: none"> ● Can students identify that Feynman’s father gave him the belief that the world is an interesting place, and people can learn about the world through observation. ● Can students quote accurately from a text when writing an explanatory paragraph?

Text(s)	“The Making of a Scientist” by Richard Feynman	“The Making of a Scientist” by Richard Feynman
Materials	<p>Lesson Materials:</p> <ul style="list-style-type: none"> ● Evidence Chart ● A highlighter ● Lined paper ● Teacher Talk Moves <p>Possible Supports During the Lesson:</p> <ul style="list-style-type: none"> ● Conversation stems tool 	<p>Additional Supports for SWSCDs:</p> <ul style="list-style-type: none"> ● Student Response Modes ● Adapting Lesson Plans ● Images, phrases, sentences representing key concepts covered in the lesson. ● Original and adapted versions of The Making of a Scientist ● Additional Supports for Diverse Learners specific for Section 01 of Grade 06 The Making of a Scientist ● Word lists (e.g., passage- or text-specific words and high frequency words) ● Essential ElementsCards - Grades 3-5 ELA (LC.RL.5.1b) <ul style="list-style-type: none"> ○ Read aloud texts ○ Paper and crayons ○ Interactive white board ○ Content delivered using multi-media (e.g., book, storyboard, video, computer, etc.) ○ Graphic organizers ○ Highlighted text ○ Preview of the text, illustrations, and details, frontloading ○ Pictures, objects, or tactile representations to illustrate the key details ○ Sentence strips that reflect text from the story that supports the key details ○ Videos or story boards/cards of the story for visual supports ○ Picture icons on graphic organizers to support non-readers and visual learners ○ Peer support, collaborative grouping

		<ul style="list-style-type: none"> ○ Prepared objects, pictures, words, sentence strips, or recorded communication supports to provide access to content and facilitate responding
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Section Overview		
Section Number	Section 2	Modified Section Overview
Description	The Making of a Scientist	The Making of a Scientist
Assessment	<p>Students give presentations on their assigned sections of “Modern Science.” After listening and taking notes on their peers’ presentations, they write a paragraph summarizing the text.</p> <p>Culminating task connections: Students demonstrate their understanding of the importance of scientific inquiry.</p> <p>Students also demonstrate their ability to form a claim, cite textual evidence, develop a response, integrate quotations, and make meaning from the text. This prepares students to write a literary analysis.</p> <p>Reading/Knowledge Look Fors:</p> <ul style="list-style-type: none"> ● How well does the student explain how modern 	<p>Students present a section of “Modern Science.” Students listen and take notes on their peers’ presentations and write a paragraph summarizing the text.</p> <p>Culminating task connections: Students demonstrate their understanding of the scientific inquiry. Students demonstrate the importance of the scientific inquiry.</p> <p>Students also demonstrate their ability to form a claim, cite textual evidence, develop a response, integrate quotations, and make meaning from the text. This prepares students for the culminating writing task.</p> <p>Reading/Knowledge Look Fors:</p> <ul style="list-style-type: none"> ● How well does the student compare and contrast modern science processes from the past and today? ● How well does the student explain how modern science is changing?

	<p>science is changing?</p> <p>Writing/ELA Skill Look Fors:</p> <ul style="list-style-type: none"> ● How well does the student integrate quotations while maintaining the flow of ideas to develop and support arguments, analyses, and explanations? ● How well does a student include quotations from the text? ● How well does the student explain the relationships between the main ideas of each section? 	<p>Writing/ELA Skill Look Fors:</p> <ul style="list-style-type: none"> ● How well does the student add appropriate quotations to develop and support arguments, analyses, and explanations? ● How well does the student summarize and explain the relationships between the main ideas of each section?
Section Length	6 lessons	4 lessons
Additional Supports for Diverse Learners (Optional)	<p>K</p> <p>The Supports Flow Chart includes information, guidance, and supports to use with individual or a small group of students during regular classroom instruction or for more intensive intervention outside of regular classroom instruction. Teachers should consult this document as needed when implementing each lesson.</p>	<p>Additional Supports for SWSCDs:</p> <ul style="list-style-type: none"> ● Original and adapted versions of The Making of a Scientist ● Louisiana Connectors ● Essential ElementsCards - Grades 3-5 Literature ● Student Response Modes - ELA ● IEP Goals ● Assistive Technology ● Additional Supports for Diverse Learners specific for Section 02 of Grade 05 The Making of a Scientist ● English Language Arts Guidebook Reading Support ● Word lists (e.g., passage- or text-specific words and high frequency words) ● Writing rubric/criteria for development and evaluation of a response

Lesson Overview		
Lesson Number	Lesson 6: Preparing for Book Clubs	Lesson is Optional
Description	In this lesson, students prepare for their first book club meeting by reading Chapters 1-3, and practicing their assigned roles with support from peers.	
Let's Express Our Understanding	Respond to the prompt: Through the lens of your role, what did you note as an important detail to mark on a sticky note?	
Lesson Look-Fors	<ul style="list-style-type: none"> • Can students track important information about vocabulary, characters, plot and theme in <i>The Templeton Twins Have an Idea</i>? • Can students provide evidence such as details and examples during a book club discussion? 	
Text(s)	<i>The Templeton Twins Have an Idea</i> by Ellis Weiner	
Materials	Lesson Materials: <ul style="list-style-type: none"> • Reading log • Book Club Roles chart • Sticky notes • Teacher Talk Moves 	Possible Supports During the Lesson: <ul style="list-style-type: none"> • Conversation stems tool

Lesson Overview		
Lesson Number	Lesson 7: Comparing and Contrasting Characters in Book Clubs	Lesson is Optional
Description	In this lesson, students meet in book clubs where they continue to add to the organizers they created in Lessons 1 and 2 (the vocabulary log and character chart). They also create a timeline to track events across the text and compare and contrast Feynman's father with the Templeton twins' father.	

Let's Express Our Understanding	Discussion Director leads the discussion: <i>How is the Templeton twins' father similar to and different from Feynman's father?</i>	
Lesson Look-Fors	<ul style="list-style-type: none"> • Can students explain how Feynman's father is similar to and different from the Templeton twins' father? • Can students engage in discussions, determining the meaning of unknown words, analyzing characters, and plotting the events in a literary text? 	
Text(s)	<ul style="list-style-type: none"> • <i>The Templeton Twins Have an Idea</i> by Ellis Weiner • "The Making of a Scientist" by Richard Feynman 	
Materials	Lesson Materials: <ul style="list-style-type: none"> • Reading log • Book Club chart • Venn diagram • Teacher Talk Moves 	Possible Supports During the Lesson: <ul style="list-style-type: none"> • Conversation stems tool

Lesson Overview		
Lesson Number	Lesson 8: Summarizing an Informational Text	Modified Lesson Overview
Description	Students learn about the process of scientific inquiry and practice summarizing a text. They independently practice the skills of finding main ideas and key details and writing a summary paragraph. This prepares students for writing by identifying key details in a text to support the main idea.	Students learn about the process of scientific inquiry and practice summarizing a text. They practice the skills of identifying main ideas and key details. Students also practice switching a summary, this prepares students for writing by identifying key details in a text to support the main idea. LC.RI.5.1b Quote accurately from a text to support inferences.
Let's Express Our Understanding	Write the main idea of "Scientific Thinking" on your flowchart.	Identify the main idea of "Scientific Thinking" on your flowchart. Reread the text and add a detailed process of scientific inquiry to your flowchart.

	Reread the text and add key details about the process of scientific inquiry to your flowchart.	
Lesson Look-Fors	<ul style="list-style-type: none"> ● Can students explain the process of scientific inquiry?? ● Can students identify the main idea and key details of a text and add them to their chart? 	<ul style="list-style-type: none"> ● Can students identify and order the process of scientific inquiry? ● Can students identify the main idea and key details of a text and add them to their chart?
Text(s)	“Scientific Thinking” text	“Scientific Thinking” text
Materials	<p>Lesson Materials:</p> <ul style="list-style-type: none"> ● Scientific Process flowchart ● Teacher Talk Moves <p>Possible Supports During the Lesson:</p> <ul style="list-style-type: none"> ● Conversation stems tool ● paired/partner reading ● choral reading or echo reading 	<p>Additional Supports for SWSCDs:</p> <ul style="list-style-type: none"> ● Student Response Modes ● Adapting Lesson Plans ● Images, phrases, sentences representing key concepts covered in the lesson. ● Original and adapted versions of The Making of a Scientist and “Scientific Thinking” text ● Additional Supports for Diverse Learners ● Word lists (e.g., passage- or text-specific words and high frequency words) ● Essential Elements Cards - Grades 3-5 ELA

Lesson Overview		
Lesson Number	Lesson 9: Comparing and Contrasting Ideas Across Texts	Modified Lesson Overview
Description	In this lesson, students learn how the lessons Feynman’s father taught him reflect the process of scientific inquiry. This prepares students for writing by illustrating how the father used scientific inquiry in his lessons.	In this lesson, students learn how the lessons Feynman’s father taught him reflect the process of scientific inquiry. This prepares students for writing by illustrating how the father used scientific inquiry in his lessons.

		LC.RI.5.3a Explain/identify the relationship between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text.
Let's Express Our Understanding	How does Feynman's father's lesson about birds reflect the process of scientific inquiry?	How does Feynman's father's lesson about birds reflect the process of scientific inquiry?
Lesson Look-Fors	<ul style="list-style-type: none"> Can students explain how Feynman's father used the process of scientific inquiry? Can students engage in discussions while comparing and contrasting ideas across multiple texts? 	<ul style="list-style-type: none"> Can students match the steps of scientific inquiry to the questions Feynman's father prompted him to ask about birds? Can students engage in discussions to compare and contrast ideas across multiple texts?
Text(s)	<p>"The Making of a Scientist" by Richard Feynman</p> <p>"Modern Science: What's Changing?" from the University of California Museum of Paleontology</p> <p>"Scientific Thinking" text</p>	<p>"The Making of a Scientist" by Richard Feynman</p> <p>"Modern Science: What's Changing?" from the University of California Museum of Paleontology</p> <p>"Scientific Thinking" text</p>
Materials	<p>Lesson Materials:</p> <ul style="list-style-type: none"> Scientific Process flowchart Teacher Talk Moves <p>Possible Supports During the Lesson:</p> <ul style="list-style-type: none"> Conversation stems tool choral reading or echo reading 	<p>Additional Supports for SWSCDs:</p> <ul style="list-style-type: none"> Student Response Modes Adapting Lesson Plans Images, phrases, sentences representing key concepts covered in the lesson. Original and adapted versions of The Making of a Scientist, "Modern Science: What's Changing?" and "Scientific Thinking" Additional Supports for Diverse Learners Word lists (e.g., passage- or text-specific words and high frequency words) Essential Elements Cards - Grades 3-5 ELA

Lesson Number	Lesson 10: Determining Main Idea and Key Details in “Modern Science: What’s Changing?”	Modified Lesson Overview
Description	<p>In this lesson, students begin to gather information about how science is changing. They jigsaw the text, working in groups to find the main idea and supporting details of an assigned section, in preparation for group presentations in the next lesson.</p>	<p>In this lesson, students begin to gather information about how science is changing. Students jigsaw the text working in groups to identify the main idea and supporting details of a section. This prepares students to present their findings to the class.</p> <p>LC.RI.5.2a Determine the main idea, and identify key details to support the main idea.</p>
Let’s Express Our Understanding	<p>Use your Evidence Chart to record the main idea and key details of your assigned section.</p> <p>In the next lesson, you will need to report on your section to teach your peers about this topic.</p>	<p>Identify the main idea and key details of an assigned section and add to your Evidence Chart.</p> <p>In the next lesson, you will need to report on your assigned section to teach peers about this topic.</p>
Lesson Look-Fors	<ul style="list-style-type: none"> ● Can students explain the ways in which modern science is changing? ● Can students provide evidence such as details and examples from an informational text? 	<ul style="list-style-type: none"> ● Can students compare and contrast modern science from science in the past? ● Can students identify appropriate evidence such as details and examples from the informational text to support ideas?
Text(s)	“Modern Science: What’s Changing?” from the University of California Museum of Paleontology	“Modern Science: What’s Changing?” from the University of California Museum of Paleontology
Materials	<p>Lesson Materials:</p> <ul style="list-style-type: none"> ● Evidence Chart ● Teacher Talk Moves <p>Possible Supports During the Lesson:</p> <ul style="list-style-type: none"> ● Conversation stems tool 	<p>Additional Supports for SWSCDs:</p> <ul style="list-style-type: none"> ● Student Response Modes ● Adapting Lesson Plans ● Images, phrases, sentences representing key concepts covered in the lesson. ● Original and adapted versions of The Making of a Scientist and “Modern Science: What’s Changing?” ● Additional Supports for Diverse Learners ● Word lists (e.g., passage- or text-specific words and high frequency words)

- Essential Elements Cards - [Grades 3-5 ELA](#)

Lesson Overview

Lesson Number	Lesson 11: Presenting a Report on an Informational Text	Modified Lesson Overview
Description	In this lesson, students give presentations on their assigned sections of “Modern Science.” After listening and taking notes on their peers’ presentations, they write a paragraph summarizing the text.	In this lesson, students give presentations on their assigned sections of “Modern Science.” After listening and taking notes on their peers’ presentations, they summarize the text. LC.RI.5.2b Summarize the text or a portion of the text read, read aloud, or presented in diverse media.
Let’s Express Our Understanding	Write a paragraph summarizing the text to explain how modern science is changing. Be sure to explain the relationships between the main ideas of each section.	Students create a permanent product to summarize the text that explains how modern science is changing. Students should identify the main idea of each section.
Lesson Look-Fors	<ul style="list-style-type: none"> ● Can students explain how modern science is changing? ● Can students make a valid claim and provide supporting evidence? 	<ul style="list-style-type: none"> ● Can students identify the main idea of each section? ● Can students identify how modern science is changing? ● Can students make a valid claim and provide supporting evidence?
Text(s)	“Modern Science: What’s Changing?” from University of California Museum of Paleontology	“Modern Science: What’s Changing?” from University of California Museum of Paleontology
Materials	<p>Lesson Materials:</p> <ul style="list-style-type: none"> ● Evidence Chart ● Presentation Rubric ● Reading log ● Teacher Talk Moves <p>Possible Supports During the Lesson:</p> <ul style="list-style-type: none"> ● Conversation stems tool 	<p>Additional Supports for SWSCDs:</p> <ul style="list-style-type: none"> ● Student Response Modes ● Adapting Lesson Plans ● Images, phrases, sentences representing key concepts covered in the lesson. ● Original and adapted versions of The Making of a Scientist and “Modern Science: What’s Changing?” ● Additional Supports for Diverse Learners

	<ul style="list-style-type: none"> • jigsaw activity tool • paragraph frame 	<ul style="list-style-type: none"> • Word lists (e.g., passage- or text-specific words and high frequency words) • Essential ElementsCards - Grades 3-5 ELA
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Section Overview		
Section Number	Section 3	Section is Optional
Description	The Making of a Scientist	
Assessment	<p>Students draft a 4-paragraph explanatory essay on changing ideas about the solar system. They provide peer feedback on the body paragraph outlines and learn to draft an introduction and conclusion.</p> <p>Culminating task connections: Students demonstrate their understanding of the scientific process and scientific inquiry.</p> <p>Students also demonstrate their ability to form a claim, cite textual evidence, develop a response, integrate quotations, and make meaning from the text. This prepares students to write a multi-paragraph essay.</p> <p>Reading/Knowledge Look Fors:</p> <ul style="list-style-type: none"> • Can students explain how changing ideas about the solar system reflect the process of scientific thinking? • Can students demonstrate their understanding of the scientific process and scientific inquiry? <p>Writing/ELA Skill Look Fors:</p> <ul style="list-style-type: none"> • How well does the student integrate quotations while maintaining the flow of ideas to develop and support arguments, analyses, and explanations? • How well does a student include quotations from the text? 	

	<ul style="list-style-type: none"> ● Can students make a valid claim and provide supporting evidence? ● Can students write an explanatory essay and practice giving and receiving peer writing feedback?
Section Length	7 lessons
Additional Supports for Diverse Learners (Optional)	<p>Additional Supports for SWSCDs:</p> <ul style="list-style-type: none"> ● Original and adapted versions of The Making of a Scientist ● Louisiana Connectors ● Essential ElementsCards - Grades 3-5 Literature ● Student Response Modes - ELA ● IEP Goals ● Assistive Technology ● Additional Supports for Diverse Learners specific for Section 03 of Grade 05 The Making of a Scientist ● English Language Arts Guidebook Reading Support ● Word lists (e.g., passage- or text-specific words and high frequency words) ● Writing rubric/criteria for development and evaluation of a response
	<p>The Supports Flow Chart includes information, guidance, and supports to use with individual or a small group of students during regular classroom instruction or for more intensive intervention outside of regular classroom instruction. Teachers should consult this document as needed when implementing each lesson.</p>

Lesson Overview		
Lesson Number	Lesson 12: Summarizing Main Ideas of a Video	Lesson is Optional
Description	<p>In this lesson, students reflect on the way that scientists' changing ideas about the number of planets reflect the process of scientific inquiry. Students start this reflection by viewing a video that explains why Pluto is no longer considered a planet. Students practice the skill of writing an evidence-based paragraph to summarize this video.</p>	
Let's Express Our Understanding	<p>Using evidence from the video, write a paragraph in your reading log to answer the question:</p> <p><i>Why is Pluto no longer considered a planet?</i></p>	

Lesson Look-Fors	<ul style="list-style-type: none"> • Can students explain why our understanding of the number of planets has changed over time? • Can students summarize the main ideas of a video? 	
Text(s)	<ul style="list-style-type: none"> • “The Making of a Scientist” by Richard Feynman 	
Materials	<p>Lesson Materials:</p> <ul style="list-style-type: none"> • Reading log • Teacher Talk Moves <p>Possible Supports During the Lesson:</p> <ul style="list-style-type: none"> • Conversation stems tool 	<p>Additional Supports for SWSCDs:</p> <ul style="list-style-type: none"> • Original and adapted versions of The Making of a Scientist and “Modern Science: What’s Changing?” • Additional Supports for Diverse Learners specific for Section 02 of Grade 06 The Making of a Scientist • Word lists (e.g., passage- or text-specific words and high frequency words) • Essential ElementsCards - Grades 3-5 ELA

Lesson Overview		
Lesson Number	Lesson 13: Comparing and Contrasting Ideas Across Texts	Lesson is Optional
Description	In this lesson, students begin reading <i>13 Planets: The Latest View of the Solar System</i> . They compare and contrast ideas about Pluto in this text and the video they viewed in Lesson 12.	
Let’s Express Our Understanding	<p>Compare and contrast “Pluto” from <i>13 Planets</i> with “Is Pluto a Planet?”</p> <p>What is similar about the two authors’ points of view towards Pluto?</p> <p>What is different about the two authors’ points of view toward Pluto?</p>	
Lesson Look-Fors	<ul style="list-style-type: none"> • Can students explain that Pluto is a dwarf planet and that with the five dwarf planets, there are thirteen planets? • Can students analyze multiple texts on the same topic, noting similarities and differences in points of view? 	
Text(s)	<i>13 Planets: The Latest View of the Solar System</i> by David A. Aguilar	

Materials	Lesson Materials: <ul style="list-style-type: none"> ● Reading log ● Teacher Talk Moves 	Possible Supports During the Lesson: <ul style="list-style-type: none"> ● Conversation stems tool ● choral reading or echo reading
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Lesson Overview		
Lesson Number	Lesson 14: Determining Main Idea and Key Details in <i>13 Planets: The Latest View of the Solar System</i>	Lesson is Optional
Description	In this lesson, the teacher models finding the main idea and key details of one section of the text. Students jigsaw the remainder of the text. They work in groups to find the main idea and key details of the remaining sections in preparation for presentations which take place in lesson 15. Students also make a first attempt at reflecting on how the changing number of planets reflects the scientific process.	
Let's Express Our Understanding	Share the key details and main idea of your section with your home group.	
Lesson Look-Fors	<ul style="list-style-type: none"> ● Can students explain the different types of planets, and the sun's importance in the solar system? ● Can students make a valid claim and provide supporting evidence? 	
Text(s)	<i>13 Planets: The Latest View of the Solar System</i> by David Aguilar "The Making of a Scientist" by Richard Feynman	
Materials	Lesson Materials: <ul style="list-style-type: none"> ● 3-Column Chart ● Evidence Chart (blank) ● Reading log ● Teacher Talk Moves 	Possible Supports During the Lesson: <ul style="list-style-type: none"> ● Conversation stems tool ● choral reading or echo reading ● jigsaw activity tool

Lesson Overview		
Lesson Number	Lesson 15: Writing Introductory Clauses and Preparing a Presentation	Lesson is Optional

Description	In this lesson, students practice reading and writing introductory clauses in order to improve their comprehension of complex texts. In addition, they continue working in groups to prepare their presentations on <i>13 Planets: The Latest View of the Solar System</i> by David Aguila.	
Let's Express Our Understanding	<p>With your group:</p> <p>Review the chapters you read in Lesson 14 and compare the main idea and key details you noted in your Evidence Chart.</p> <p>Continue to read your assigned section and complete the Scientific Process Evidence Chart.</p> <p>Begin to prepare your presentation for tomorrow.</p>	
Lesson Look-Fors	<ul style="list-style-type: none"> • Can students make a valid claim and provide supporting evidence? • Can students create a report on an informational text? 	
Text(s)	<i>13 Planets: The Latest View of the Solar System</i> by David Aguila	
Materials	<p>Lesson Materials:</p> <ul style="list-style-type: none"> • Sentence Syntax organizer • Scientific Process Evidence Chart • 13 Planets Evidence Chart • Presentation Rubric • Reading log • Highlighters • Teacher Talk Moves 	<p>Possible Supports During the Lesson:</p> <ul style="list-style-type: none"> • Conversation stems tool

Lesson Overview

Lesson Number	Lesson 16: Presentations on "13 Planets"	Lesson is Optional
Description	In this lesson, students orally present reports on their assigned sections of 13 Planets. They take notes on one another's reports, and use this new information to add to their thinking about how the changing number of planets reflects the scientific process.	

Let's Express Our Understanding	Review your flowchart on the process of scientific inquiry. Add at least one additional example to answer the question: How has our thinking about how the number of planets changed over time? How do these changes in thinking reflect the process of scientific inquiry?	
Lesson Look-Fors	<ul style="list-style-type: none"> • Can students describe key details about each of the 13 planets and how that idea has changed over time? • Can students practice a speech to a variety of contexts and tasks using formal English? 	
Text(s)	<i>13 Planets: The Latest View of the Solar System</i> by David Aguilar	
Materials	Lesson Materials: <ul style="list-style-type: none"> • Materials for presentation • Scientific Process Flowchart • Scientific Process Evidence Chart • Teacher Talk Moves 	Possible Supports During the Lesson: <ul style="list-style-type: none"> • Conversation stems tool

Lesson Overview		
Lesson Number	Lesson 17: Outlining Explanatory Paragraphs	Lesson is Optional
Description	In this lesson, students outline explanatory paragraphs about how the changing number of planets reflects the process of scientific inquiry. Students practice skills of writing topic sentences, selecting evidence, and explaining how that evidence links to the topic sentence. This prepares students for writing by practicing the structure of an essay.	
Let's Express Our Understanding	How do changing ideas about the solar system reflect the process of scientific inquiry? Provide a second example other than Pluto. Remember to use the TEE Paragraph Frame.	
Lesson Look-Fors	<ul style="list-style-type: none"> • Can students explain how the changing number of planets reflects the process of scientific thinking? • Can students gather evidence and organize your thoughts in order to outline two explanatory paragraphs? 	
Text(s)	<i>13 Planets: The Latest View of the Solar System</i> by David Aguilar	

Materials	Lesson Materials: <ul style="list-style-type: none"> ● Materials for presentation ● Scientific Process Flowchart ● Scientific Process Evidence Chart ● Teacher Talk Moves ● Reading log ● TEE Paragraph Frame 	Possible Supports During the Lesson: <ul style="list-style-type: none"> ● Conversation stems tool
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Lesson Overview		
Lesson Number	Lesson 18: Drafting Four Paragraph Explanatory Essays with a Focus on Introductions and Conclusions	Lesson is Optional
Description	In this lesson, students draft a 4-paragraph explanatory essay on changing ideas about the solar system. They provide peer feedback on the body paragraph outlines drafted in Lesson 17, and learn to draft an introduction and conclusion. This prepares students for writing by practicing the structure of an essay.	
Let's Express Our Understanding	Draft your essay. On notebook paper, neatly write: Introduction Two body paragraphs Conclusion	
Lesson Look-Fors	<ul style="list-style-type: none"> ● Can students explain how changing ideas about the solar system reflect the process of scientific thinking? ● Can students make a valid claim and provide supporting evidence? 	
Text(s)	<i>13 Planets: The Latest View of the Solar System</i> by David Aguilar	
Materials	Lesson Materials: <ul style="list-style-type: none"> ● TEE Paragraph Frame ● Notebook paper ● Teacher Talk Moves 	Possible Supports During the Lesson: <ul style="list-style-type: none"> ● Conversation stems tool

Lesson Overview

Lesson Number	Lesson 19: Engaging in Book Club Discussions and Determining the Theme of a Text	Lesson is Optional
Description	In this lesson, students meet in book clubs and continue the work they have been doing to record new vocabulary, notes on characterization and a timeline of the text. They also begin to determine possible themes of the novel, as they are now halfway through the text.	
Let's Express Our Understanding	<p>Discussion Director leads a discussion of the following questions:</p> <p>The theme of a text is the author's message about life or human nature. What might be some possible themes of <i>The Templeton Twins Have an Idea</i>, so far?</p> <p>With your book club, list at least 2 - 3 possible themes in your reading log.</p> <p>Choose one theme, and look back in the text to find evidence for this theme. Mark the evidence with sticky notes.</p>	
Lesson Look-Fors	<ul style="list-style-type: none"> ● Can students determine some possible themes of <i>The Templeton Twins Have an Idea</i>? ● Can students make a valid claim and provide supporting evidence? 	
Text(s)	<i>The Templeton Twins Have an Idea</i> by Ellis Weiner	
Materials	<p>Lesson Materials:</p> <ul style="list-style-type: none"> ● Reading log ● Book Club chart ● Sticky notes ● Teacher Talk Moves 	<p>Possible Supports During the Lesson:</p> <ul style="list-style-type: none"> ● Conversation stems tool ● transitions and evidence sentence starters

Section Overview

Section Number	Section 4	Modified Section Overview
Description	The Making of a Scientist	The Making of a Scientist
Assessment	<p>Students complete the Strategies to Support a Claim chart using the two best examples of each strategy used to support the text’s claim.</p> <p>Culminating task connections: Students demonstrate their ability to best determine the evidence to support their claim. It also helps deepen their understanding about how scientific thinking can change over time.</p> <p>Students also demonstrate their ability to form a claim, cite textual evidence, develop a response, integrate quotations, analyze relationships, and make meaning from the text. This prepares students to write a multi-paragraph essay.</p> <p>Reading/Knowledge Look Fors:</p> <ul style="list-style-type: none"> ● Can students explain how Galileo may have discovered the planet Neptune through observation and inference? ● Can students demonstrate their understanding how scientific thinking can change over time with further observations? <p>Writing/ELA Skill Look Fors:</p>	<p>Students complete a Strategies to Support a Claim chart by selecting the two best examples of each strategy used to support the text’s claim.</p> <p>Culminating task connections: Students demonstrate their ability to identify the best evidence to support their claim. It also deepens their understanding about how scientific thinking can change over time.</p> <p>Students also demonstrate their ability to form a claim, cite textual evidence, develop a response, integrate quotations, analyze relationships, and make meaning from the text. This prepares students to write a multi-paragraph essay.</p> <p>Reading/Knowledge Look Fors:</p> <ul style="list-style-type: none"> ● Can students identify how Galileo may have discovered the planet Neptune by using observation and inference? ● Can students demonstrate their understanding of how scientific thinking can change over time with further observations? <p>Writing/ELA Skill Look Fors:</p> <ul style="list-style-type: none"> ● How well does the student add appropriate quotations to develop and support arguments, analyses, and explanations?

	<ul style="list-style-type: none"> • How well does the student integrate quotations while maintaining the flow of ideas to develop and support arguments, analyses, and explanations? • Can students identify the ways an author supports his or her point or claim? • How well does the student include phrasing to show transitions? 	<ul style="list-style-type: none"> • Can students identify examples an author uses that supports his or her point or claim?
Section Length	5 lessons	3 lessons
Additional Supports for Diverse Learners (Optional)		<p>Additional Supports for SWSCDs:</p> <ul style="list-style-type: none"> • Original and adapted versions of The Making of a Scientist • Louisiana Connectors • Essential ElementsCards - Grades 3-5 Literature • Student Response Modes - ELA • IEP Goals • Assistive Technology • Additional Supports for Diverse Learners specific for Section 04 of Grade 05 The Making of a Scientist • English Language Arts Guidebook Reading Support • Word lists (e.g., passage- or text-specific words and high frequency words) • Writing rubric/criteria for development and evaluation of a response

The [Supports Flow Chart](#) includes information, guidance, and supports to use with individuals or a small group of students during regular classroom instruction or for more intensive intervention outside of regular classroom instruction. Teachers should consult this document as needed when implementing each lesson.

Lesson Overview

Lesson Number	Lesson 20: Galileo Galilei and the Process of Scientific Inquiry	Modified Lesson Overview
Description	<p>In this lesson, students begin to learn about Galileo Galilei’s contributions to science, and how those contributions reflect the scientific process. They read an informational article and practice determining the meanings of unknown words and determining main ideas and key details.</p>	<p>In this lesson, students begin to learn about Galileo Galilei’s contributions to science, and how those contributions reflect the scientific process. Students also determine the main idea and key details of an informational text.</p> <p>LC.RI.5.3a Explain/identify the relationship between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text.</p>
Let’s Express Our Understanding	<p>Work with your partner to answer this question in your reading log:</p> <p><i>How do Galileo’s accomplishments reflect the process of scientific inquiry?</i></p>	<p>Work with your partner to complete this task in your reading log:</p> <p>Match Galileo’s accomplishments to parts of the process of scientific inquiry.</p>
Lesson Look-Fors	<ul style="list-style-type: none"> ● Can students explain how Galileo’s accomplishments reflect the process of scientific inquiry because he used observations and experiments to draw conclusions? ● Can students make a valid claim and provide supporting evidence? 	<ul style="list-style-type: none"> ● Can students identify how Galileo’s accomplishments reflect the process of scientific inquiry because he used observations and experiments to draw conclusions? ● Can students make a valid claim and provide supporting evidence?
Text(s)	<p>“Galileo Galilei: Biography, Inventions and Other Facts” by Nola Taylor Redd</p>	<p>“Galileo Galilei: Biography, Inventions and Other Facts” by Nola Taylor Redd</p>
Materials	<p>Lesson Materials:</p> <ul style="list-style-type: none"> ● Reading log ● Scientific Process flowchart ● Teacher Talk Moves <p>Possible Supports During the Lesson:</p> <ul style="list-style-type: none"> ● Conversation stems tool 	<p>Additional Supports for SWSCDs:</p> <ul style="list-style-type: none"> ● Student Response Modes ● Adapting Lesson Plans ● Images, phrases, sentences representing key concepts covered in the lesson. ● Original and adapted versions of The Making of a Scientist and “Galileo Galilei: Biography, Inventions and Other Facts” ● Additional Supports for Diverse Learners

		<ul style="list-style-type: none"> • Word lists (e.g., passage- or text-specific words and high frequency words) • Essential ElementsCards - Grades 3-5 ELA
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Lesson Overview		
Lesson Number	Lesson 21: Comparing Informational Text Structures	Modified Lesson Overview
Description	In this lesson, students view a video about changes in telescope technology over time. They compare and contrast the text structures of this video with “Galileo Galilei,” and outline the information from the video.	In this lesson, students view a video about changes in telescope technology over time. They compare and contrast this video with “Galileo Galilei,” and take notes on information in the video. LC.RI.5.3a Explain/identify the relationship between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text.
Let’s Express Our Understanding	How has telescope technology changed over time? Use the Chronological Outline in your Informational Text Structures Outline to plan a response to this question. Write your response in your reading log.	How has telescope technology changed over time? Use the Chronological Outline in your Informational Text Structures Outline to plan a response to this question. Write your response in your reading log.
Lesson Look-Fors	<ul style="list-style-type: none"> • Can students explain how telescope technology has improved over time? • Can students compare the way information is presented between problem and solution and chronological texts? 	<ul style="list-style-type: none"> • Can students explain how telescope technology has improved over time? • Can students identify ways information is presented the same and differently between problem and solution and chronological texts?
Text(s)	“Galileo Galilei: Biography, Inventions & Other Facts” by Nola Taylor Redd “Hunting the Edge of Space” video	“Galileo Galilei: Biography, Inventions & Other Facts” by Nola Taylor Redd “Hunting the Edge of Space” video
Materials	Lesson Materials: <ul style="list-style-type: none"> • Informational Text Structures Outline 	Additional Supports for SWSCDs: <ul style="list-style-type: none"> • Student Response Modes

	<ul style="list-style-type: none"> ● Reading log ● Teacher Talk Moves <p>Possible Supports During the Lesson:</p> <ul style="list-style-type: none"> ● Conversation stems tool 	<ul style="list-style-type: none"> ● Adapting Lesson Plans ● Images, phrases, sentences representing key concepts covered in the lesson. ● Original and adapted versions of The Making of a Scientist and “Galileo Galilei: Biography, Inventions and Other Facts” ● Additional Supports for Diverse Learners ● Word lists (e.g., passage- or text-specific words and high frequency words) ● Essential Elements Cards - Grades 3-5 ELA
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Lesson Overview		
Lesson Number	Lesson 22: Comparing Galileo and Newton using Accountable Talk	Lesson is Optional
Description	In this lesson, students explain the relationships between individuals in two texts by engaging in Accountable Talk about Newton's and Galileo's contributions to the telescope. This is the students' first opportunity to experience Accountable Talk to prepare for the Extension Task.	
Let's Express Our Understanding	Compare and contrast Newton's and Galileo's contributions to the telescope.	
Lesson Look-Fors	<ul style="list-style-type: none"> ● Can students explain that Galileo improved the telescope to a magnification of 8 or 9 times from 3 times and that Newton used mirrors in telescopes to solve the problem of fuzzy images and rainbow colors, without using very long telescopes? ● Can students make a valid claim and provide supporting evidence? 	
Text(s)	“Galileo Galilei: Biography, Inventions & Other Facts” by Nola Taylor Redd	
Materials	<p>Lesson Materials:</p> <ul style="list-style-type: none"> ● Reading log ● Chart paper ● Markers 	<p>Possible Supports During the Lesson:</p> <ul style="list-style-type: none"> ● Conversation stems tool ● Accountable Talk

	<ul style="list-style-type: none"> • Teacher Talk Moves 	
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Lesson Overview		
Lesson Number	Lesson 23: Determining Theme in Book Clubs	Lesson is Optional
Description	In this lesson, students meet in book clubs and continue the work they have been doing to record new vocabulary, notes on characterization and a timeline of the text. They also continue to work on determining and revising possible themes of the novel.	
Let's Express Our Understanding	<p>Discussion Director leads discussion:</p> <p>In book clubs, review the tentative theme your group determined in the last book club meeting. Add evidence from Chapters 9-12 that supports your theme. Revise your theme if necessary.</p>	
Lesson Look-Fors	<ul style="list-style-type: none"> • Can students explain how Abigail and John used careful observation and creative thinking to escape from the basement? • Can students come prepared for book club discussions and determine a developing theme? 	
Text(s)	<i>The Templeton Twins Have an Idea</i> by Ellis Weiner	
Materials	<p>Lesson Materials:</p> <ul style="list-style-type: none"> • Reading log • Book Club Roles chart • Teacher Talk Moves 	<p>Possible Supports During the Lesson:</p> <ul style="list-style-type: none"> • Conversation stems tool • transitions and evidence sentence starters

Lesson Overview		
Lesson Number	Lesson 24: Finding Evidence to Support a Point in “New Theory: Galileo Discovered Neptune”	Modified Lesson Overview
Description	In this lesson, students read the article “New Theory:	In this lesson, students read the article “New Theory: Galileo

	Galileo Discovered Neptune” and identify reasons and evidence the author uses to support the text’s claim.	Discovered Neptune” and an adapted version as needed, and identify reasons and evidence the author uses to support the text’s claim. LC.RI.5.8a Explain how an author uses reasons and evidence to support particular points in a text. LC.RI.5.8b Identify reasons and evidence that support an author’s point(s) in a text
Let’s Express Our Understanding	Complete the Strategies to Support a Claim chart using the two best examples of each strategy used to support the text’s claim.	Complete the Strategies to Support a Claim chart using the two best examples of each strategy used to support the text’s claim.
Lesson Look-Fors	<ul style="list-style-type: none"> • Can students complete the Strategies to Support a Claim chart using the two best examples of each strategy used to support the text’s claim? • Can students identify the ways an author supports his or her point or claim? 	<ul style="list-style-type: none"> • Can students complete the Strategies to Support a Claim chart using the two best examples of each strategy used to support the text’s claim? • Can students identify the ways an author supports his or her point or claim?
Text(s)	“New Theory: Galileo Discovered Neptune” by Robert Roy Britt	“New Theory: Galileo Discovered Neptune” by Robert Roy Britt
Materials	<p>Lesson Materials:</p> <ul style="list-style-type: none"> • Strategies to Support a Claim chart • Highlighters in four colors • Teacher Talk Moves <p>Possible Supports During the Lesson:</p> <ul style="list-style-type: none"> • Conversation stems tool • paired/partner reading 	<p>Additional Supports for SWSCDs:</p> <ul style="list-style-type: none"> • Student Response Modes • Adapting Lesson Plans • Images, phrases, sentences representing key concepts covered in the lesson. • Original and adapted versions of The Making of a Scientist and “New Theory: Galileo Discovered Neptune” • Additional Supports for Diverse Learners specific for Section 04 of Grade 06 The Making of a Scientist • Word lists (e.g., passage- or text-specific words and high frequency words) • Essential ElementsCards - Grades 3-5 ELA

Section Overview

Section Number	Section 5	Modified Section Overview
Description	The Making of a Scientist	The Making of a Scientist
Assessment	<p>Students participate in a Socratic Seminar discussion:</p> <p>Inner circle: Does Galileo or Feynman’s father provide a better example of using the process of scientific inquiry? Outer circle: Take notes on participants’ contributions, responses to others and use of evidence.</p> <p>Culminating task connections: Students demonstrate their understanding of how well Feynman’s father taught him about the process of scientific inquiry.</p> <p>Students also demonstrate their ability to form a claim, cite textual evidence, develop a response, integrate quotations, analyze relationships, and make meaning from the text. This prepares students to write a multi-paragraph essay about how Feynman learned the importance of the scientific process.</p> <p>Reading/Knowledge Look Fors:</p> <ul style="list-style-type: none"> ● Can students make a claim about whether they believe Galileo's or Feynman’s father better used the process of scientific inquiry? ● Can students argue that Galileo was a greater example of the scientific process because he used observation and experiments to make major 	<p>Students participate in the outer circle of a Socratic Seminar discussion by completing notes on participants contributions, responses, and use of evidence.</p> <p>Inner circle: Does Galileo or Feynman’s father provide a better example of using the process of scientific inquiry? Outer circle: Take notes on participants’ contributions, responses to others and use of evidence.</p> <p>Culminating task connections: Students demonstrate their understanding of how Feynman’s father taught him about the process of scientific inquiry.</p> <p>Students also demonstrate their ability to identify a claim, cite textual evidence, develop a response, integrate quotations, analyze relationships, and make meaning from the text. This prepares students to write an essay about how Feynman learned the importance of the scientific process.</p> <p>Reading/Knowledge Look Fors:</p> <ul style="list-style-type: none"> ● Can students identify or develop a claim about whether they believe Galileo's or Feynman’s father better used the process of scientific inquiry? ● Can students explain that Galileo was a better example of the scientific process because he used observation and experiments to make major discoveries that affect our understandings of the world today?

	<p>discoveries that affect our understandings of the world today?</p> <ul style="list-style-type: none"> • Can students argue that Feynman’s father is a better example of the scientific process because he used the process to answer everyday questions in ordinary life? <p>Writing/ELA Skill Look Fors:</p> <ul style="list-style-type: none"> • How well does the student integrate quotations while maintaining the flow of ideas to develop and support arguments, analyses, and explanations? • Can students come prepared for a discussion and engage in accountable talk? 	<ul style="list-style-type: none"> • Can students explain that Feynman’s father is a better example of the scientific process because he used the process to answer everyday questions in ordinary life? • Can students understand that both fathers prompted their sons to utilize the process of scientific inquiry to answer unknown questions. <p>Writing/ELA Skill Look Fors:</p> <ul style="list-style-type: none"> • How well does the student integrate appropriate quotations, develop and support arguments, analyses, and explanations? • Can students come prepared for a discussion and engage in accountable talk?
Section Length	2 lessons	2 lessons
Additional Supports for Diverse Learners (Optional)		<p>Additional Supports for SWSCDs:</p> <ul style="list-style-type: none"> • Original and adapted versions of The Making of a Scientist • Louisiana Connectors • Essential ElementsCards - Grades 3-5 Literature • Student Response Modes - ELA • IEP Goals • Assistive Technology • Additional Supports for Diverse Learners specific for Section 05 of Grade 05 The Making of a Scientist • English Language Arts Guidebook Reading Support • Word lists (e.g., passage- or text-specific words and high frequency words) • Writing rubric/criteria for development and evaluation of a response
<p>The Supports Flow Chart includes information, guidance, and supports to use with individual or a small group of students during regular classroom instruction or for more intensive intervention outside of regular classroom instruction. Teachers should consult this document as needed when implementing each lesson.</p>		

Lesson Overview		
Lesson Number	Lesson 25: Reading Fluently and Comparing Main Ideas Across Texts	Modified Lesson Overview
Description	In this lesson, students practice reading fluently by rereading “New Theory: Galileo Discovered Neptune” with a focus on using punctuation to guide phrasing. They also explain the relationship between a main idea in “New Theory: Galileo Discovered Neptune” and a main idea from “The Making of a Scientist” by collecting specific information from both texts to support that idea.	In this lesson, students will read or be read to “New Theory: Galileo Discovered Neptune” and an adapted version as needed, with focus on using punctuation to guide phrasing. Students identify the relationship between a main idea in “New Theory: Galileo Discovered Neptune” and a main idea in “The Making of a Scientist” by collecting information from both texts to support that idea. LC.RI.5.10a Read or be read to a variety of informational texts or adapted texts. LC.RI.5.2a Determine the main idea, and identify key details to support the main idea.
Let’s Express Our Understanding	How could this quote from “The Making of a Scientist” serve as the main idea of “New Theory: Galileo Discovered Neptune”? What details from both texts support this main idea? On your TEE Paragraph Frame, collect evidence from both texts to support this main idea.	How could this quote from “The Making of a Scientist” serve as the main idea of “New Theory: Galileo Discovered Neptune”? -I learned very early on the difference between knowing the name of something, and knowing something” What details from both texts supports this idea? Collect evidence from both texts to support this main idea.
Lesson Look-Fors	<ul style="list-style-type: none"> • Can students explain that Galileo and Feynman both recognized the importance of observation, not memorization, to build understanding? • Can students support a main idea using key details from two texts? 	<ul style="list-style-type: none"> • Can students understand that Galileo and Feynman both recognized the importance of observation, not memorization, to build understanding? • Can students support a main idea using key details from two texts?
Text(s)	“New Theory: Galileo Discovered Neptune” by Robert Roy Britt	“New Theory: Galileo Discovered Neptune” by Robert Roy Britt “The Making of a Scientist” by Richard Feynman

	“The Making of a Scientist” by Richard Feynman	
Materials	<p>Lesson Materials:</p> <ul style="list-style-type: none"> ● Fluency Tracker ● TEE Paragraph Frame ● Teacher Talk Moves <p>Possible Supports During the Lesson:</p> <ul style="list-style-type: none"> ● Conversation stems tool 	<p>Additional Supports for SWSCDs:</p> <ul style="list-style-type: none"> ● Student Response Modes ● Adapting Lesson Plans ● Images, phrases, sentences representing key concepts covered in the lesson. ● Original and adapted versions of The Making of a Scientist and “New Theory: Galileo Discovered Neptune” ● Additional Supports for Diverse Learners ● Word lists (e.g., passage- or text-specific words and high frequency words) ● Essential Elements Cards - Grades 3-5 ELA

Lesson Overview		
Lesson Number	Lesson 26: Comparing Galileo and Feynman Using Accountable Talk	Modified Lesson Overview
Description	In this lesson, students explain the relationships between individuals in two texts by engaging in a Socratic Seminar or fishbowl discussion about Galileo and Feynman’s father’s use of the process of scientific inquiry.	<p>In this lesson, students identify the relationships between individuals in two texts by engaging in a Socratic Seminar or fishbowl discussion about Galileo and Feynman’s father’s use of the process of scientific inquiry.</p> <p>LC.RI.5.3b Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.</p>
Let’s Express Our Understanding	<p>Socratic Seminar discussion:</p> <p>Inner circle: Does Galileo or Feynman’s father provide a better example of using the process of scientific inquiry?</p>	Socratic Seminar discussion:

	<p>Outer circle: Take notes on participants' contributions, responses to others and use of evidence.</p>	<p>Have students participate in the outer circle in order for them to develop a deeper understanding of both fathers using the scientific inquiry.</p> <p>Inner circle: Does Galileo or Feynman's father provide a better example of using the process of scientific inquiry?</p>
<p>Lesson Look-Fors</p>	<ul style="list-style-type: none"> ● Can students make a claim about whether you believe Galileo's or Feynman's father better used the process of scientific inquiry? ● Can students come prepared for a discussion and engage in accountable talk? 	<ul style="list-style-type: none"> ● Can students identify a claim about whether they believe Galileo's or Feynman's father better used the process of scientific inquiry? ● Can students engage in accountable talk? ● Can students take appropriate notes on peers' findings.
<p>Text(s)</p>	<p>"Galileo Galilei: Biography, Inventions & Other Facts" by Nola Taylor Redd "New Theory: Galileo Discovered Neptune" by Robert Roy Britt "The Making of a Scientist" by Richard Feynman</p>	<p>"Galileo Galilei: Biography, Inventions & Other Facts" by Nola Taylor Redd "New Theory: Galileo Discovered Neptune" by Robert Roy Britt "The Making of a Scientist" by Richard Feynman</p>
<p>Materials</p>	<p>Lesson Materials:</p> <ul style="list-style-type: none"> ● "Making of a Scientist" Evidence Charts ● Scientific Process flowchart ● "Galileo Discovered Neptune" TEE chart ● Conversation Stems learning tool ● Reading log ● Teacher Talk Moves <p>Possible Supports During the Lesson:</p> <ul style="list-style-type: none"> ● Conversation stems tool ● Socratic Seminar 	<p>Additional Supports for SWSCDs:</p> <ul style="list-style-type: none"> ● Student Response Modes ● Adapting Lesson Plans ● Images, phrases, sentences representing key concepts covered in the lesson. ● Original and adapted versions of The Making of a Scientist and "New Theory: Galileo Discovered Neptune" and "Galileo Galilei: Biography, Inventions & Other Facts" ● Additional Supports for Diverse Learners ● Word lists (e.g., passage- or text-specific words and high frequency words) ● Essential ElementsCards - Grades 3-5 ELA

Section Overview

Section Number	Section 6	Section is Optional
Description	The Making of a Scientist	
Assessment	<p>Students demonstrate their ability to read, view, understand, and express understanding of two new texts about the solar system through the completion of paired reading comprehension questions.</p> <p>Culminating task connections: Students demonstrate their ability to read, view, understand, and express understanding of two new texts about the solar system through the completion of paired reading comprehension questions.</p> <p>Students also demonstrate their ability to reiterate their understandings of the readings. This prepares students to write a literary analysis with specific details.</p> <p>Reading/Knowledge Look Fors:</p> <ul style="list-style-type: none"> ● How well does the student analyze relationships among the details of a text to identify the shared main idea of both texts? ● Can students demonstrate their ability to read, view, understand, and express understanding of two new texts about the solar system? <p>Writing/ELA Skill Look Fors:</p> <ul style="list-style-type: none"> ● How well does the student integrate quotations while maintaining the flow of ideas to develop and support arguments, analyses, and explanations? ● Can students provide evidence from the text in support of the claim? 	
Section Length	3 lessons	
Additional Supports for Diverse Learners (Optional)	The Supports Flow Chart includes information, guidance, and supports to use with individual or a small group of students during regular classroom instruction or for more intensive intervention outside of regular classroom instruction. Teachers should consult this document as needed when implementing each lesson.	

Lesson Overview		
Lesson Number	Lesson 27: Cold-Read Task, Part 1	Lesson is Optional
Description	Students read an article and watch a video independently. They then answer multiple-choice and short answer questions to demonstrate understanding of the text.	
Let's Express Our Understanding	You have approximately 35 minutes to read and view the texts and answer questions 1-6.	
Lesson Look-Fors	<ul style="list-style-type: none"> • Can students demonstrate their ability to read, view, understand, and express understanding of two new texts about the solar system? • Can students identify evidence to support their claim? 	
Text(s)	"Quarter of Americans Convinced Sun Revolves Around the Earth, Survey Finds" by Liz Fields Galileo: Sun-Centered System video	
Materials	Lesson Materials: <ul style="list-style-type: none"> • Cold-Read Task 	Possible Supports During the Lesson: <ul style="list-style-type: none"> • Allowed Resources • Necessary accommodations

Lesson Overview		
Lesson Number	Lesson 28: Cold-Read Task, Part 2	Lesson is Optional
Description	In this lesson, students independently reread the article and watch the video from Part 1 of the Close Read assessment. Then, they write an essay response to a prompt to demonstrate understanding of the text.	
Let's Express Our Understanding	You have approximately 35 minutes to reread and review the texts and answer question 7.	
Lesson Look-Fors	<ul style="list-style-type: none"> • Can students compose a multi-paragraph essay that explains how the theory of the sun and planets has changed over time? • Can students cite evidence from both sources to support their claim? 	

Text(s)	"Quarter of Americans Convinced Sun Revolves Around the Earth, Survey Finds" by Liz Fields	
Materials	Lesson Materials: <ul style="list-style-type: none"> ● Cold-Read Task 	Possible Supports During the Lesson: <ul style="list-style-type: none"> ● Conversation stems tool

Lesson Overview		
Lesson Number	Lesson 29: Continuing to Develop Ideas About Theme in Book Clubs	Lesson is Optional
Description	In this lesson, students meet in book clubs and continue the work they have been doing to record new vocabulary, notes on characterization, and a timeline of the text. They also continue to work on determining and revising possible themes of the novel.	
Let's Express Our Understanding	In book clubs, review the tentative theme your group created in the last book club meeting. Add evidence from Chapters 12-13. Revise your theme if necessary.	
Lesson Look-Fors	<ul style="list-style-type: none"> ● Can students explain how Abigail and John used observation and creative thinking to trick the Dean twins? ● Can students make revisions to their theme based on new evidence? 	
Text(s)	<i>The Templeton Twins Have an Idea</i> by Ellis Weiner	
Materials	Lesson Materials: <ul style="list-style-type: none"> ● Reading log ● Book Club Roles chart ● Teacher Talk Moves 	Possible Supports During the Lesson: <ul style="list-style-type: none"> ● Conversation stems tool

Section Overview

Section Overview		
Section Number	Section 7	Modified Section Overview
Description	The Making of a Scientist	The Making of a Scientist
Assessment	<p>Students write a response to the prompt: “Consider two of the examples Richard Feynman points out in his memoir: the birds, and the wagon. What lesson was Feynman’s father trying to teach Richard about science through one of these two examples?”</p> <p>Culminating task connections: Students demonstrate their understanding of the lessons Feynman was given and how it influenced his life.</p>	<p>Consider two of the examples Richard Feynman points out in his memoir: the birds, and the wagon. What lesson was Feynman’s father trying to teach Richard about science through one of these two examples?</p> <p>Create a permanent product that identifies and explains the lesson Richard Feynman’s father was trying to teach Richard about science, using examples, details, and quotations to develop the explanation. Be sure to use proper grammar, conventions, spelling,</p>

Students also demonstrate their ability to form a claim, cite textual evidence, develop a response, integrate quotations, analyze relationships, and make meaning from the text.

Reading/Knowledge Look Fors:

- How well does the student analyze the interactions and relationship between Richard and his father?
- Can students make the claim that Feynman’s father gives his son “something wonderful as a child”, and that is the gift of teaching him to think like a scientist?

Writing/ELA Skill Look Fors:

- How well does the student integrate quotations while maintaining the flow of ideas to develop and support arguments, analyses, and explanations?
- Can the student justify their claim by providing specific details that support their answer?
- Can students use linking words to connect their ideas, edit their essay for conventions, and publish their essays?

and grade appropriate words and phrases, including words that signal relationships (e.g., however, although, moreover, in addition , etc.).

Culminating task connections:

Students demonstrate their understanding of the lessons Feynman was given and how it influenced his life.

Students also demonstrate their ability to form a claim, cite textual evidence, develop a response, integrate quotations, analyze relationships, and make meaning from the text.

Reading/Knowledge Look Fors:

- Select one of the examples: the birds or the wagon.
- Summarize the example as told by Feynman in “The Making of a Scientist.”
- Identify how Richard’s thinking changed throughout the selected example.
- Identify examples of the questions he asked.
- Identify the steps in the process of scientific inquiry.
- Match steps of the scientific inquiry to Richard’s thinking.
- Determine the lesson Feynman’s father was trying to teach him about science.

Writing/ELA Skill Look Fors:

- How well does the student integrate quotations while maintaining the flow of ideas to develop and support arguments, analyses, and explanations?
- Can the student justify their claim by providing specific details that support their answer?
- Can students use linking words to connect their ideas, edit their essay for conventions, and publish their essays?

Section Length	5 lessons	4 lessons
Additional Supports for Diverse Learners (Optional)	The Supports Flow Chart includes information, guidance, and supports to use with individual or a small group of students during regular classroom instruction or for more intensive intervention outside of regular classroom instruction. Teachers should consult this document as needed when implementing each lesson.	<p>Additional Supports for SWSCDs:</p> <ul style="list-style-type: none"> • Original and adapted versions of The Making of a Scientist • Louisiana Connectors • Essential ElementsCards - Grades 3-5 Literature • Student Response Modes - ELA • IEP Goals • Assistive Technology • Additional Supports for Diverse Learners specific for Section 07 of Grade 05 The Making of a Scientist • English Language Arts Guidebook Reading Support • Word lists (e.g., passage- or text-specific words and high frequency words) • Writing rubric/criteria for development and evaluation of a response

Lesson Overview		
Lesson Number	Lesson 30: Building Understanding and Outlining an Explanatory Essay for the Culminating Writing Task	Modified Lesson Overview
Description	In this lesson, students begin the writing process for the Culminating Writing Task by outlining essays on what Feynman’s father has taught him about science.	In this lesson, students begin the writing process for the Culminating Writing Task by identifying evidence from essays on what Feynman’s father has taught him about science.
Let’s Express Our Understanding	Use the TEE chart to find evidence from the text to support each topic sentence.	Use the TEE chart to match evidence from the text to support each topic sentence.

	Explain how each piece of evidence connects to your topic sentence.	Explain how each piece of evidence connects to your topic sentence.
Lesson Look-Fors	<ul style="list-style-type: none"> ● Can students demonstrate their understanding of what Feynman’s father taught him about science? ● Can students develop topic sentences, evidence, and explanations for the body paragraphs of an explanatory essay? 	<ul style="list-style-type: none"> ● Can students demonstrate their understanding of what Feynman’s father taught him about science? ● Can students develop topic sentences, evidence, and explanations for the body paragraphs of an explanatory essay?
Text(s)	“The Making of a Scientist” by Richard Feynman “Scientific Thinking” text	“The Making of a Scientist” by Richard Feynman “Scientific Thinking” text
Materials	<p>Lesson Materials:</p> <ul style="list-style-type: none"> ● Culminating Writing Task prompt ● Culminating Writing Task rubric ● TEE Paragraph Frame ● “Making of a Scientist” Evidence Chart ● Scientific Process flowchart ● Teacher Talk Moves <p>Possible Supports During the Lesson:</p> <ul style="list-style-type: none"> ● Conversation stems tool 	<p>Additional Supports for SWSCDs:</p> <ul style="list-style-type: none"> ● Student Response Modes ● Adapting Lesson Plans ● Images, phrases, sentences representing key concepts covered in the lesson. ● Original and adapted versions of The Making of a Scientist ● Additional Supports for Diverse Learners ● Word lists (e.g., passage- or text-specific words and high frequency words) ● Essential ElementsCards - Grades 3-5 ELA

Lesson Overview		
Lesson Number	Lesson 31: Drafting Explanatory Essays for the Culminating Writing Task	Modified Lesson Overview
Description	In this lesson, students continue the writing process for the Culminating Writing Task by drafting essays on what Feynman’s father has taught him about science.	<p>In this lesson, students continue the writing process for the Culminating Writing Task by drafting essays on what Feynman’s father has taught him about science.</p> <p>LC.W.5.2a Produce an informative/explanatory permanent product which has an introduction that includes context/background</p>

		information on a topic and establishes a central idea or focus about the topic.
Let's Express Our Understanding	Draft your essay! On notebook paper, neatly write your: introduction paragraph. three body paragraphs. conclusion paragraph.	Students begin to draft their essay using a writing template. The draft should include an introduction paragraph with 2 sentences that states a claim, a body paragraph that cites evidence, and a conclusion paragraph.
Lesson Look-Fors	<ul style="list-style-type: none"> Can students make the claim that Feynman's father gives his son "something wonderful as a child", and that is the gift of teaching him to think like a scientist? Can students use their notes to draft an expository essay that includes an introductory paragraph, three body paragraphs, and a conclusion? 	<ul style="list-style-type: none"> Can students make the claim that Feynman's father gives his son "something wonderful as a child", and that is the gift of teaching him to think like a scientist? Can students use their notes and as needed a writing template to draft an expository essay that includes an introductory paragraph, three body paragraphs, and a conclusion?
Text(s)	"The Making of a Scientist" by Richard Feynman "Scientific Thinking" text	"The Making of a Scientist" by Richard Feynman "Scientific Thinking" text
Materials	<p>Lesson Materials:</p> <ul style="list-style-type: none"> Culminating Writing Task prompt TEE Paragraph Frame "Making of a Scientist" Evidence Chart Scientific Process flowchart Lined paper Teacher Talk Moves <p>Possible Supports During the Lesson:</p> <ul style="list-style-type: none"> Conversation stems tool 	<p>Additional Supports for SWSCDs:</p> <ul style="list-style-type: none"> Student Response Modes Adapting Lesson Plans Images, phrases, sentences representing key concepts covered in the lesson. Original and adapted versions of The Making of a Scientist Additional Supports for Diverse Learners Word lists (e.g., passage- or text-specific words and high frequency words) Essential ElementsCards - Grades 3-5 ELA

Lesson Overview

Lesson Number	Lesson 32: Revising Explanatory Essays for the Culminating Writing Task	Modified Lesson Overview
Description	<p>In this lesson, students continue the writing process for the Culminating Writing Task by revising their essays on what Feynman’s father has taught him about science.</p>	<p>In this lesson, students continue the writing process for the Culminating Writing Task by revising their essays on what Feynman’s father has taught him about science.</p> <p>LC.W.5.5b With guidance and support from peers and adults, strengthen permanent products by revising and editing (e.g., review a permanent product, strengthen an opinion piece by adding another reason, fix incorrect spelling).</p>
Let’s Express Our Understanding	Revise your essay!	Students revise their essay.
Lesson Look-Fors	<ul style="list-style-type: none"> ● Can students make the claim that Feynman’s father gives his son “something wonderful as a child”, and that is the gift of teaching him to think like a scientist? ● Can students make revisions based on peer feedback? 	<ul style="list-style-type: none"> ● Can students make the claim that Feynman’s father gives his son “something wonderful as a child”, and that is the gift of teaching him to think like a scientist? ● Can students make revisions based on adult and peer feedback?
Text(s)	“The Making of a Scientist” by Richard Feynman	“The Making of a Scientist” by Richard Feynman
Materials	<p>Lesson Materials:</p> <ul style="list-style-type: none"> ● Culminating Writing Task prompt ● First draft of essay ● Culminating Writing Task rubric ● Highlighters in three colors <p>Possible Supports During the Lesson:</p> <ul style="list-style-type: none"> ● Conversation stems tool 	<p>Additional Supports for SWSCDs:</p> <ul style="list-style-type: none"> ● Student Response Modes ● Adapting Lesson Plans ● Images, phrases, sentences representing key concepts covered in the lesson. ● Original and adapted versions of The Making of a Scientist ● Additional Supports for Diverse Learners ● Word lists (e.g., passage- or text-specific words and high frequency words) ● Essential ElementsCards - Grades 3-5 ELA

Lesson Overview

Lesson Number	Lesson 33: Editing and Publishing Explanatory Essays for the Culminating Writing Task	Modified Lesson Overview
Description	In this lesson, students continue the writing process for the Culminating Writing Task by revising essays on what Feynman’s father has taught him about the scientific process, and then publishing their essays.	In this lesson, students continue the writing process for the Culminating Writing Task by revising essays on what Feynman’s father has taught him about the scientific process, and then publishing their essays. LC.W.5.5b With guidance and support from peers and adults, strengthen permanent products by revising and editing (e.g., review a permanent product, strengthen an opinion piece by adding another reason, fix incorrect spelling).
Let’s Express Our Understanding	Publish your essay!	Students publish their permanent product.
Lesson Look-Fors	<ul style="list-style-type: none"> ● Can students make the claim that Feynman’s father gives his son “something wonderful as a child”, and that is the gift of teaching him to think like a scientist? ● Can students use linking words to connect their ideas, edit their essay for conventions, and publish their essays? 	<ul style="list-style-type: none"> ● Can students make the claim that Feynman’s father gives his son “something wonderful as a child”, and that is the gift of teaching him to think like a scientist? ● Can students use linking words to connect their ideas, edit their essay for conventions, and publish their essays? ● Can students strengthen their essay by revising and editing?
Text(s)	“The Making of a Scientist” by Richard Feynman	“The Making of a Scientist” by Richard Feynman
Materials	<p>Lesson Materials:</p> <ul style="list-style-type: none"> ● Culminating Writing Task prompt ● Essay draft ● Culminating Writing Task rubric ● Linking Words chart <p>Possible Supports During the Lesson:</p> <ul style="list-style-type: none"> ● Conversation stems tool 	<p>Additional Supports for SWSCDs:</p> <ul style="list-style-type: none"> ● Student Response Modes ● Adapting Lesson Plans ● Images, phrases, sentences representing key concepts covered in the lesson. ● Original and adapted versions of The Making of a Scientist ● Additional Supports for Diverse Learners

		<ul style="list-style-type: none"> • Word lists (e.g., passage- or text-specific words and high frequency words) • Essential ElementsCards - Grades 3-5 ELA
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Lesson Overview		
Lesson Number	Lesson 34: Determining Main Ideas in "Giants of Science: Isaac Newton"	Lesson is Optional
Description	In this lesson, students begin reading Chapter 8 of "Giants of Science: Isaac Newton." They determine the two main ideas of the chapter based on specific information in the text.	
Let's Express Our Understanding	Answer this question in your reading log: <i>What main ideas of this text have you determined so far?</i>	
Lesson Look-Fors	<ul style="list-style-type: none"> • Can students explain that although Newton was difficult to work with, he made important contributions to science? • Can students determine two main ideas in an informational text? 	
Text(s)	<i>Giants of Science: Isaac Newton</i> by Kathleen Krull	
Materials	<p>Lesson Materials:</p> <ul style="list-style-type: none"> • Reading log • Teacher Talk Moves <p>Possible Supports During the Lesson:</p> <ul style="list-style-type: none"> • Conversation stems tool 	

Section Overview

Section Number	Section 8	Section is Optional
Description	The Making of a Scientist	
Assessment	<p>As a group, students discuss and determine the theme of <i>The Templeton Twins Have an Idea</i>.</p> <p>Culminating task connections: Students demonstrate their understanding of the importance of scientific or creative thinking.</p> <p>Students also demonstrate their ability to form a claim, cite textual evidence, develop a response, integrate quotations, analyze relationships, and make meaning from the text.</p> <p>Reading/Knowledge Look Fors:</p> <ul style="list-style-type: none"> ● Can students explain the theme of the text is the importance of thinking like a scientist or creative thinking? <p>Writing/ELA Skill Look Fors:</p> <ul style="list-style-type: none"> ● Can students come prepared for book club discussions and use key details to determine a theme? ● How well can a student use key details from the text to support their claim? 	
Section Length	2 lessons	

Additional Supports for Diverse Learners (Optional)	The Supports Flow Chart includes information, guidance, and supports to use with individual or a small group of students during regular classroom instruction or for more intensive intervention outside of regular classroom instruction. Teachers should consult this document as needed when implementing each lesson.
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Lesson Overview		
Lesson Number	Lesson 35: Isaac Newton and the Process of Scientific Inquiry	Lesson is Optional
Description	In this lesson, students finish reading Chapter 8 of <i>Giants of Science: Isaac Newton</i> . They determine two main ideas of the text, and how they are supported by key details. They also reflect on how Newton contributed to the process of scientific inquiry.	
Let's Express Our Understanding	Review the two main ideas you found yesterday, and revise them, if necessary. With your partner, write a paragraph for each main idea. Be sure to include supporting evidence from the text and a transition word or phrase to indicate the second main idea.	
Lesson Look-Fors	<ul style="list-style-type: none"> ● Can students explain how Isaac Newton contributed to the process of scientific inquiry by writing a book with new discoveries and theories that were not understood before that time? ● Can students determine two main ideas in an informational text and support with evidence? 	
Text(s)	<i>Giants of Science: Isaac Newton</i> by Kathleen Krull	
Materials	Lesson Materials: <ul style="list-style-type: none"> ● Reading log ● Scientific Process flowchart ● Teacher Talk Moves 	Possible Supports During the Lesson: <ul style="list-style-type: none"> ● Conversation stems tool ● TEE Paragraph Frames

Lesson Overview

Lesson Number	Lesson 36: Determining Theme in Book Clubs	Lesson is Optional
Description	In this lesson, students meet in book clubs and continue the work they have been doing to record new vocabulary, notes on characterization, and a timeline of the text. They also finish work on determining themes of the novel.	
Let's Express Our Understanding	<p>Discussion Director leads discussion: Read the feedback from your peers on your theme chart. As a group, discuss the feedback, and discuss the other themes and evidence that you read on your Gallery Walk. Make any revisions to your theme.</p>	
Lesson Look-Fors	<ul style="list-style-type: none"> ● Can students explain the theme of the text is the importance of thinking like a scientist or creative thinking? ● Can students come prepared for book club discussions and use key details to determine a theme? 	
Text(s)	<i>The Templeton Twins Have an Idea</i> by Ellis Weiner	
Materials	<p>Lesson Materials:</p> <ul style="list-style-type: none"> ● Reading log ● Book Club Roles chart ● Chart paper and markers ● Teacher Talk Moves 	<p>Possible Supports During the Lesson:</p> <ul style="list-style-type: none"> ● Conversation stems tool ● transitions and evidence sentence starters

Section Overview

Section Number	Section 9	Section is Optional
Description	The Making of a Scientist	
Assessment	<p>Students write a response to the prompt: “Using two of the examples from the text, explain what Feynman was given and how it influenced his life.”</p> <p>Culminating task connections: Students demonstrate their understanding of the lessons Feynman was given and how it influenced his life.</p> <p>Students also demonstrate their ability to form a claim, cite textual evidence, develop a response, integrate quotations, analyze relationships, and make meaning from the text. This prepares students to write a literary analysis.</p> <p>Reading/Knowledge Look Fors:</p> <ul style="list-style-type: none">• How well does the student analyze the interactions and relationship between Richard and his father?• How well does the student explain the lessons Feynman’s father taught him about observing the world?	

	<ul style="list-style-type: none"> How well does the student understand that one example of Feynman’s father teaching him to observe the world happens when Feynman is wondering about why the birds peck at their feathers? <p>Writing/ELA Skill Look Fors:</p> <ul style="list-style-type: none"> How well does the student integrate quotations while maintaining the flow of ideas to develop and support arguments, analyses, and explanations? How well does a student include quotations from the text? How well does the student include phrasing to show transitions?
Section Length	4 lessons
Additional Supports for Diverse Learners (Optional)	The Supports Flow Chart includes information, guidance, and supports to use with individual or a small group of students during regular classroom instruction or for more intensive intervention outside of regular classroom instruction. Teachers should consult this document as needed when implementing each lesson.

Lesson Overview		
Lesson Number	Lesson 37: Outlining an Explanatory Essay for the Extension Task	Lesson is Optional
Description	In this lesson, students begin the writing process by outlining an explanatory essay for the Extension Task.	
Let’s Express Our Understanding	<p>Using your three best ideas, write a topic sentence for each body paragraph. Use your TEE Paragraph Frame to find evidence from each text to support each topic sentence.</p> <p>Add an explanation of how each piece of evidence connects to your topic sentence for that paragraph.</p>	
Lesson Look-Fors	<ul style="list-style-type: none"> Can students explain that both <i>The Templeton Twins Have an Idea</i> and “The Making of a Scientist” include main ideas about thinking like a scientist? Can students provide evidence that connects to the topic sentence for that paragraph? 	

Text(s)	“The Making of a Scientist” by Richard Feynman <i>The Templeton Twins Have an Idea</i> by Ellis Weiner	
Materials	Lesson Materials: <ul style="list-style-type: none"> • TEE Paragraph Frame 	Possible Supports During the Lesson: <ul style="list-style-type: none"> • Conversation stems tool

Lesson Overview		
Lesson Number	Lesson 38: Drafting Explanatory Essays for the Extension Task	Lesson is Optional
Description	In this lesson students continue the writing process for the Extension Task by drafting essays on what Feynman’s father has taught him about science.	
Let’s Express Our Understanding	Draft your essay! On notebook paper, neatly write: Introduction Three body paragraphs Conclusion	
Lesson Look-Fors	<ul style="list-style-type: none"> • Can students explain that both <i>The Templeton Twins Have an Idea</i> and “The Making of a Scientist” include main ideas about thinking like a scientist? • Can students produce clear and coherent writing in which the development and the organization are appropriate to the task? 	
Text(s)	“The Making of a Scientist” by Richard Feynman <i>The Templeton Twins Have an Idea</i> by Ellis Weiner	
Materials	Lesson Materials: <ul style="list-style-type: none"> • TEE Paragraph Frame 	Possible Supports During the Lesson: <ul style="list-style-type: none"> • Conversation stems tool

Lesson Overview

Lesson Number	Lesson 39: Revising and Editing Explanatory Essays for the Extension Task	Lesson is Optional
Description	In this lesson, students continue the writing process for the Extension Task by revising essays on what Feynman’s father has taught him about science, with support from peers.	
Let’s Express Our Understanding	<p>Edit your essay for grammar, spelling, and punctuation. Include linking words and phrases to connect your ideas. Introduce each text by title and author: Titles of articles are punctuated using quotation marks: “The Making of a Scientist” Titles of articles are punctuated using underlining or italics: <u>The Templeton Twins Have an Idea</u>, or <i>The Templeton Twins Have an Idea</i>.</p>	
Lesson Look-Fors	<ul style="list-style-type: none"> • Can students explain that both <i>The Templeton Twins Have an Idea</i> and “The Making of a Scientist” include central ideas about thinking like a scientist? • Can students use linking words and phrases to connect their ideas? 	
Text(s)		
Materials	<p>Lesson Materials:</p> <ul style="list-style-type: none"> • Essay draft • Extension Task rubric • Highlighters in three colors 	<p>Possible Supports During the Lesson:</p> <ul style="list-style-type: none"> • Conversation stems tool

Lesson Overview

Lesson Number	Lesson 40: Comparing “The Making of a Scientist” and <i>The Templeton Twins Have an Idea</i> using Accountable Talk	Lesson is Optional
Description	In this lesson, students engage in Accountable Talk around a central idea from both “The Making of a Scientist” and <i>The Templeton Twins Have an Idea</i> . They also review the unit goals and reflect on their learning from the unit.	
Let’s Express Our Understanding	In this unit, what did you learn about:	

	<p>How scientific theories change over time? The process of scientific inquiry? Reading, writing, speaking and listening?</p> <p>Refer to specific texts and activities from the unit to answer each question.</p>	
Lesson Look-Fors	<ul style="list-style-type: none"> ● Can students explain that scientific theories change over time because as technology improves and scientists gain more information? ● Can students produce clear and coherent writing in which the development and the organization are appropriate to the task? 	
Text(s)	<p>“The Making of a Scientist” by Richard Feynman <i>The Templeton Twins Have an Idea</i> by Ellis Weiner</p>	
Materials	<p>Lesson Materials:</p> <ul style="list-style-type: none"> ● Reading log ● Extension Task TEE Paragraph Frame 	<p>Possible Supports During the Lesson:</p> <ul style="list-style-type: none"> ● Conversation stems tool